

Mailroom
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10-25-02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/311,837
Filing Date: May 14, 1999
Applicant: Barta et al.
Group Art Unit: 1625
Examiner: C. Chang
Title: Aromatic Sulfone Hydroxamic Acid Metalloprotease Inhibitors
Attorney Docket: 3124/4/US (formerly MON-116.6)

24/IDS
+ effort.

Hon. Commissioner of Patents and Trademarks
Washington, D.C. 20231

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir/Madam:

Pursuant to 37 C.F.R. §§ 1.56, 1.97, and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION

The patents, publications and other information submitted for consideration by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

II. COPIES

a. X Submitted herewith is a legible copy of (i) each U.S. patent application publication, U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; (iii) for each cited pending U.S. application, the application specification including the claims, and any drawing of the application which caused it to be listed including the claims directed to that portion and (iv) all other information or that portion which caused it to be listed.

b. _____ Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Serial Number

U.S. Filing Date

III. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

- a. X Except as may be indicated below in (b), all of the patents, publications, or other information are in the English language (concise explanation not required).
- b. _____ A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3))
- c. _____ The following additional information is provided for the Examiner's consideration.

IV. CROSS REFERENCE TO RELATED APPLICATION(S)

- a. _____ The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this(these) application(s) to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. § 122.

Serial No.

Filing Date

Art Unit

V. THIS IDS IS BEING FILED UNDER

- a. _____ 37 C.F.R. § 1.97(b): (check only one box)

1. _____ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.

2. _____ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.

3. _____ before the mailing of a first Office action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).

4. _____ before the mailing of a first Office action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.

- b. X 37 C.F.R. § 1.97(c): (check only one box)

• before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.

this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

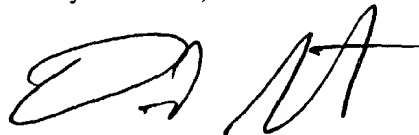
Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

Dated:

10/25/02

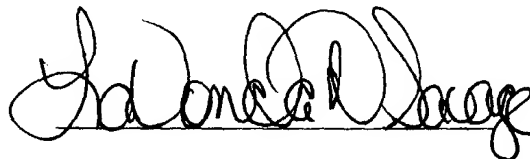
By:



David M. Gryte
Reg. No. 41,809
Harness, Dickey & Pierce, P.L.C.
7700 Bonhomme, Suite 400
St. Louis, MO 63105

CERTIFICATE OF MAILING

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FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
SUPPLEMENTAL INFORMATION DISCLOSURE
CITATION

(Use several sheets if necessary)

Sheet 1 of 1

ATTORNEY DOCKET No.

SERIAL No.

3124/4/US

09/311,837

APPLICANT

Barta et al.

FILING DATE

GROUP

May 14, 1999

1625

U.S. PATENT DOCUMENTS

| Ref. Desig. | Examiner's Initials | Document Number | Date | Name | Class/ Subclass | (If appropriate) Filing Date |
|----------------|------------------------|--------------------|------|------|--------------------|---------------------------------|
| | | | | | | |

FOREIGN PATENT DOCUMENTS

| Ref. Desig. | Examiner's Initials | Document Number | Date | Country | Class/ Subclass | Translation Yes | No |
|----------------|------------------------|--------------------|------|---------|--------------------|--------------------|----|
| | | | | | | | |

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

| Ref. Desig. | Examiner's Initials | |
|----------------|------------------------|---|
| 1. | | Supplemental Declaration of Joseph J. McDonald, pp. 1-7 |

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

/IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Barta et al.
Serial No: 09/311,837
Filed: May 14, 1999
For: AROMATIC SULFONE HYDROXAMIC ACID
METALLOPROTEASES INHIBITOR
Group Art Unit: 1625
Examiner: Ceila Chang
Attorney Ref: 3124/4/US (formerly 116.6/US)

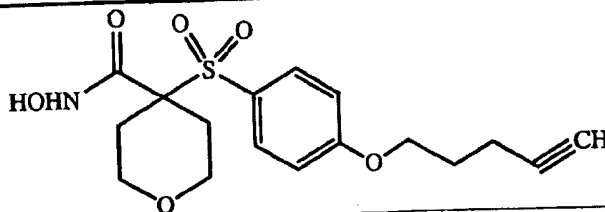
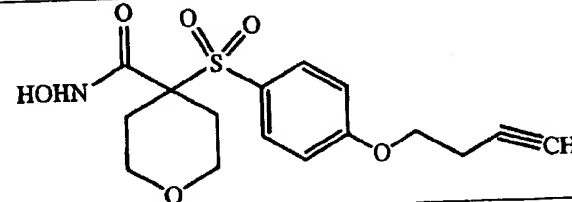
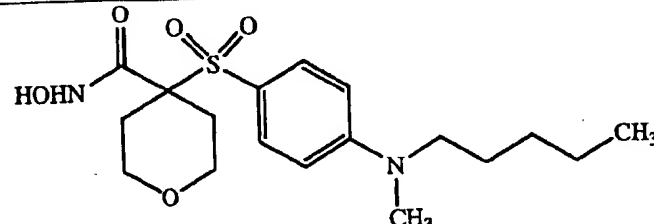
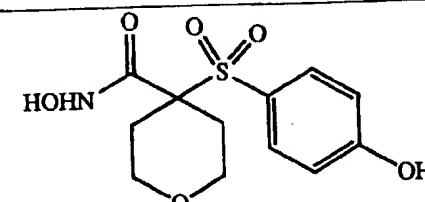
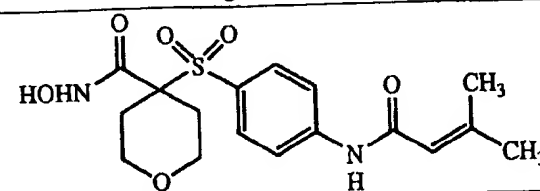
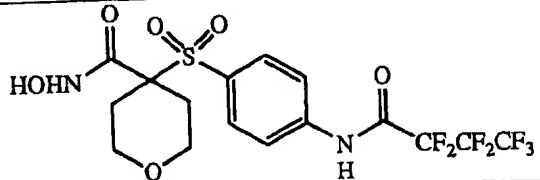
Page 24
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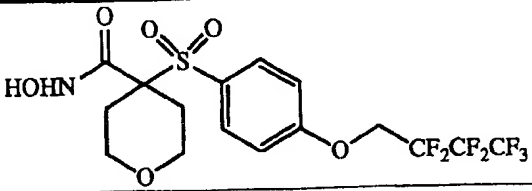
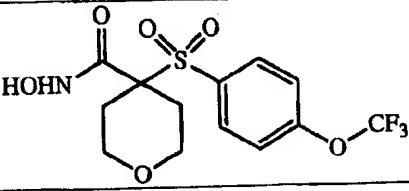
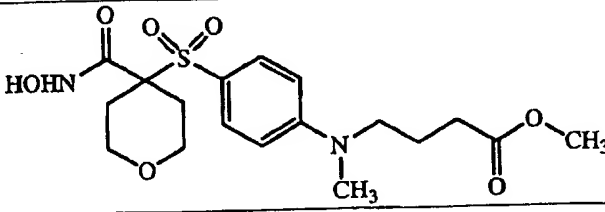
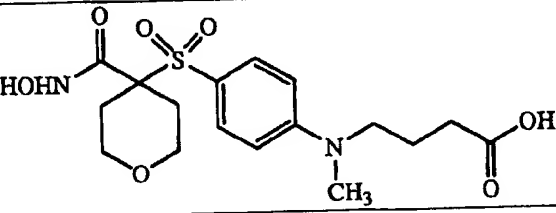
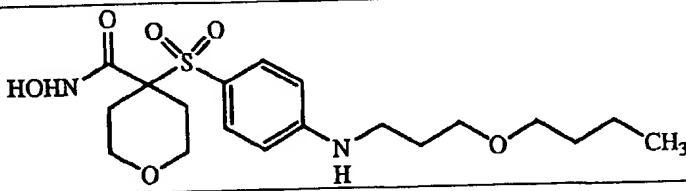
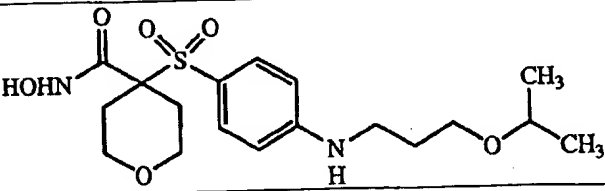
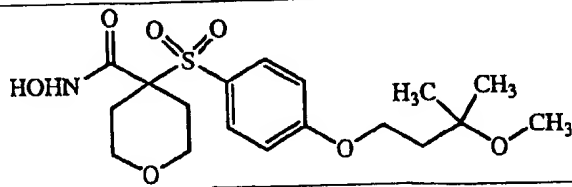
Supplemental Declaration of Joseph J. McDonald

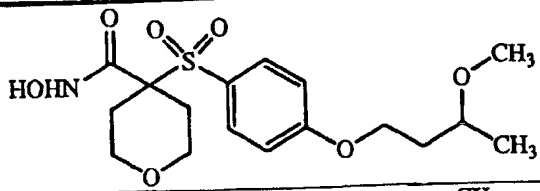
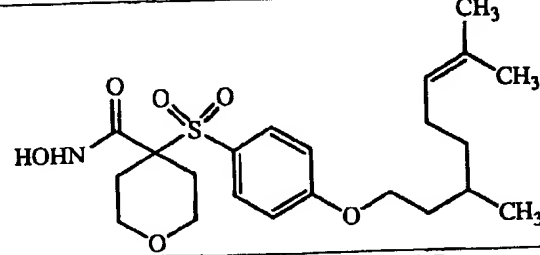
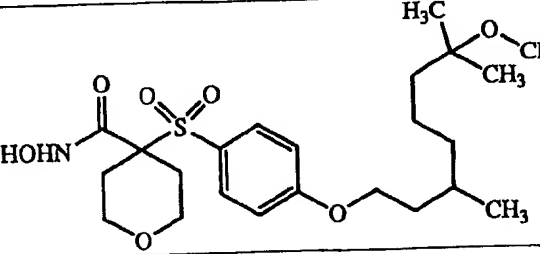
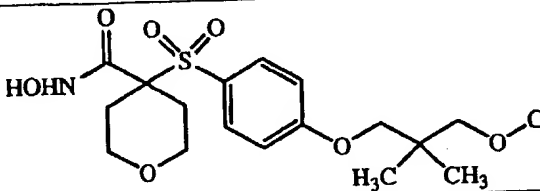
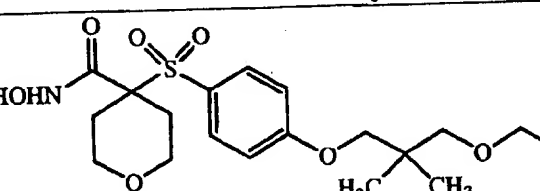
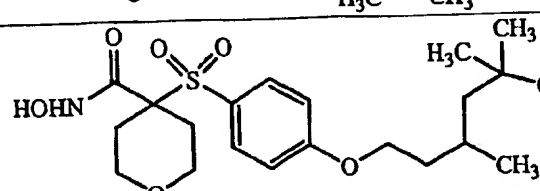
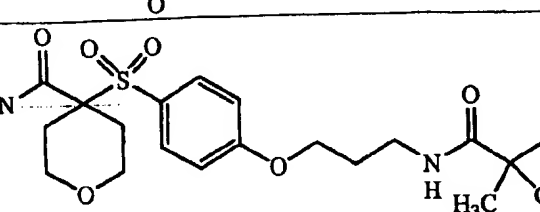
I, Dr. Joseph J. McDonald, declare the following:

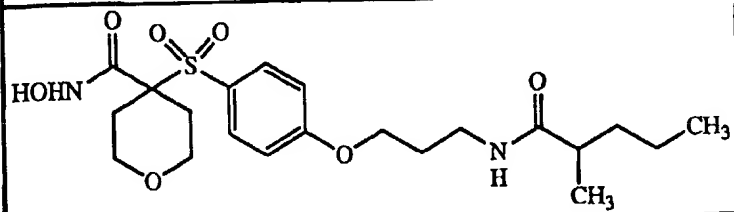
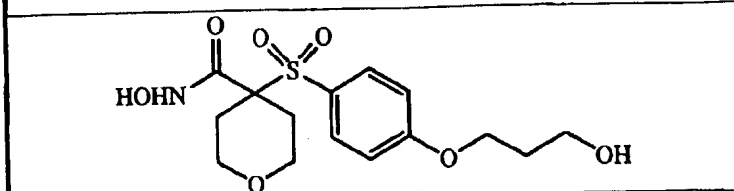
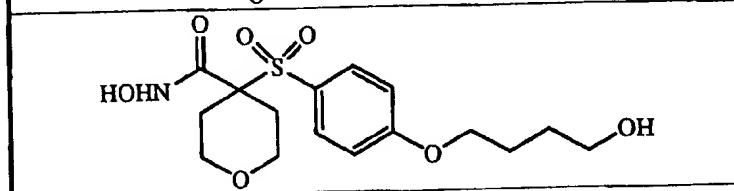
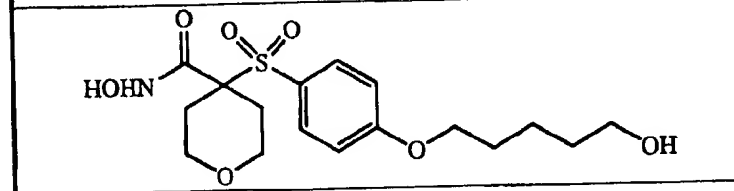
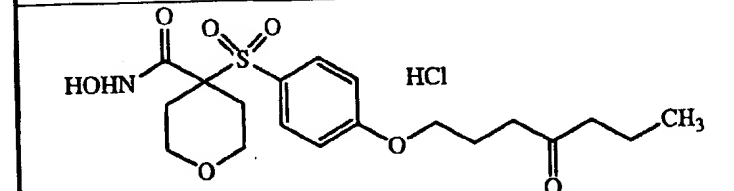
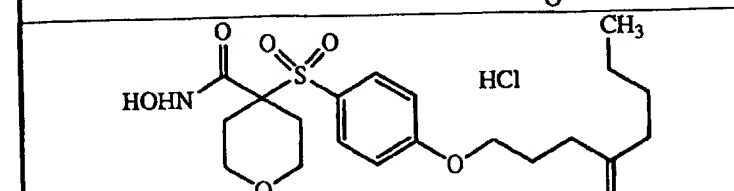
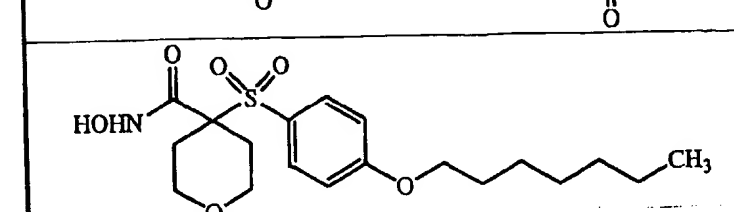
1. I am a named inventor in the above-referenced patent application.
2. I am a group leader in computational chemistry at Pharmacia Corporation, the assignee of the above-referenced patent application.
3. I have discovered that the Table in Paragraph 5 on pages 5-6 of my November 2, 2001 declaration (filed November 5, 2001) inadvertently omits several tetrahydropyranyl compounds that have a single-ring sulfonyl substituent and were synthesized and tested by Pharmacia. The omitted compounds and their corresponding MMP-1 and MMP-13 inhibition data are shown in the following table, to the extent I have located such compounds and data in the Pharmacia compound database at my disposal:

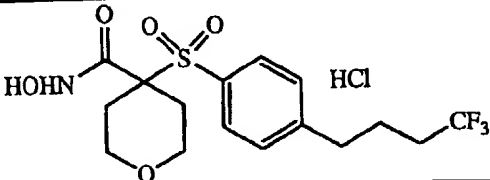
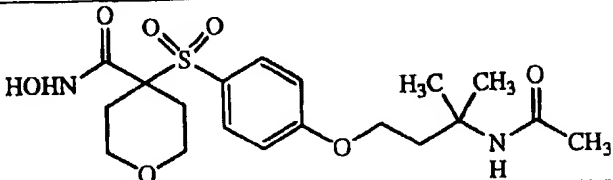
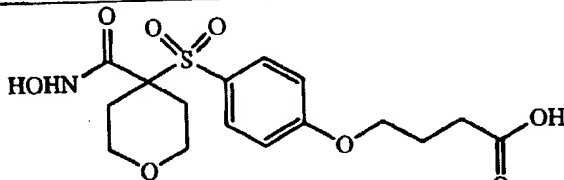
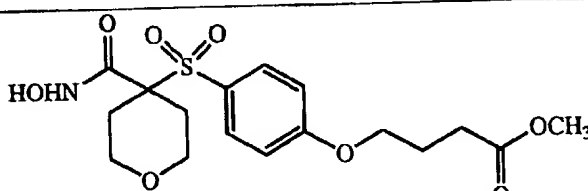
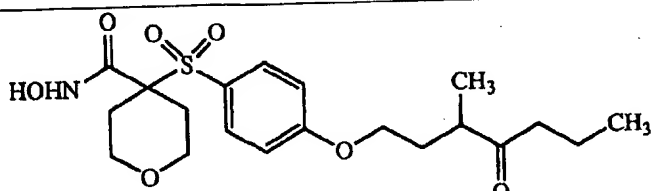
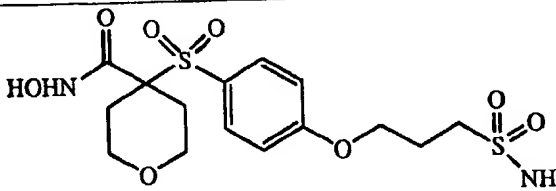
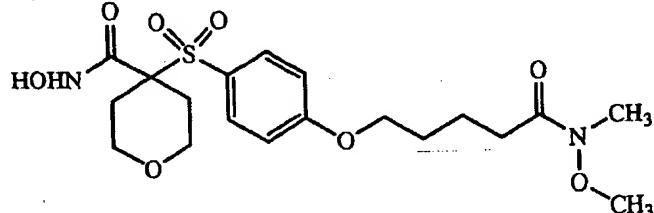
Tetrahydropyranyl Compounds with a Single-Ring Substituent on the Sulfonyl

| Compound | MMP-1 Inhibition IC50 (K _i) | MMP-13 Inhibition IC50 (K _i) |
|---|--|---|
|  | N/A | 2.0 |
|  | N/A | 1.8 |
|  | >10,000 | 670 |
|  | 1100 | 180 |
|  | >10,000 | 12.2 |
|  | >10,000 | 1400 |

| Compound | MMP-1 Inhibition IC ₅₀ (K _i) | MMP-13 Inhibition IC ₅₀ (K _i) |
|---|--|---|
|  | >10,000 | 13.9 |
|  | 1800 | 48.5 |
|  | >10,000 | 1400 |
|  | >10,000 | >10,000 |
|  | >10,000 | 25.4 |
|  | >10,000 | 590 |
|  | >10,000 | 5.0 |

| Compound | MMP-1 Inhibition IC ₅₀ (K _i) | MMP-13 Inhibition IC ₅₀ (K _i) |
|---|--|---|
|  | >10,000 | 6.0 |
|  | >10,000 | 2.5 |
|  | >10,000 | 3.3 |
|  | >10,000 | 690 |
|  | >10,000 | 350 |
|  | >10,000 | 60.0 |
|  | N/A | 30.0 |

| Compound | MMP-1 Inhibition IC ₅₀ (K _i) | MMP-13 Inhibition IC ₅₀ (K _i) |
|---|--|---|
|  | >10,000 | 5.7 |
|  | 1929 | 7.0 |
|  | N/A | 9.0 |
|  | N/A | 14.8 |
|  | (850) | (0.81) |
|  | (1465) | (0.23) |
|  | (3950) | (0.19) |

| Compound | MMP-1 Inhibition IC50 (K _i) | MMP-13 Inhibition IC50 (K _i) |
|---|--|---|
|  | (>10,000) | (255) |
|  | N/A | 203.0 |
|  | N/A | 304.0 |
|  | 9864 | 4.1 |
|  | >10,000 | 2.6 |
|  | N/A | 564.8 |
|  | N/A | 8.6 |

EV 317348773 US

Attorney Docket No: 3124/4/US
HDP Docket No: 6794-000021/US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Barta et al.
Serial No: 09/311,837
Filed: May 14, 1999
For: Aromatic Sulfone Hydroxamic Acid Metalloprotease Inhibitor
Group Art Unit: 1625
Examiner: Celia C. Chang
Attorney Ref: 3124/4/US

PAPER 23

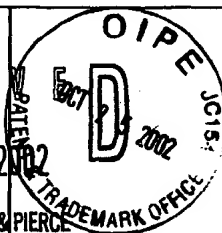
10/25/02 Supplemental Information Disclosure Statement (including stamped return postcard)

| | | |
|--|--------------------|------------------|
| Applicant: Barta et al. | Client Matter # | 3124/4/US (21US) |
| Serial/Patent # 09/311,837 | Filing/Issue Date: | May 14, 1999 |
| Title: Aromatic Sulfone Hydroxamic Acid Metalloproteases Inhibitor | | |

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Transmittal (1 page);
 Fee Transmittal (1 page);
 Supplemental Disclosure Statement (4 pages);
 HDP Form 1449 (1 page); and 1 cited reference;
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Attorney: David M. Gryte/lrs

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PTO/SB/21 (08-00)

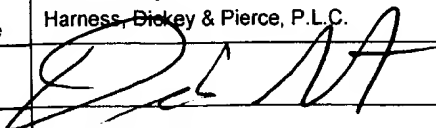
Approved for use through 10/31/2002. OMB 0651-0031

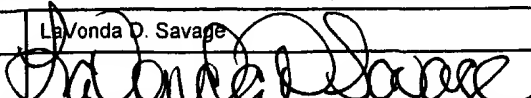
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| TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i> | Application Number | 09/311,837 |
| | Filing Date | May 14, 1999 |
| | First Named Inventor | Barta et al. |
| | Group Art Unit | 1625 |
| | Examiner Name | Celia Chang |
| Total Number of Pages in This Submission | Attorney Docket Number | 3124/US |

| ENCLOSURES (check all that apply) | | |
|--|---|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Supplemental Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Receipt Postcard 1 reference Check for \$180.00 |
| Remarks | | |
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| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|---|
| Firm or Individual name | David M. Gryte Harness, Dickey & Pierce, P.L.C. |
| Signature |  |
| Date | October 25, 2002 |

| CERTIFICATE OF MAILING | | | |
|--|---|------|------------------|
| I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: October 25, 2002 | | | |
| Typed or printed name | Layonda D. Savage | | |
| Signature |  | Date | October 25, 2002 |

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